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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,164	02/12/2004	Brent G. Duckering	16321-US	3780
23553	7590	09/16/2004	EXAMINER	
MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			PHUNKULH, BOB A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AL

Office Action Summary	Application No. 10/776,164	Applicant(s) DUCKERING ET AL.	
	Examiner Bob A. Phunkulh	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/3/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 4, 9 and 13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 9, and 14 of U.S. Patent No. 6,721,325. Although the conflicting claims are not identical, they are not patentably distinct from each other because elimination of an element and its function provides no patentable difference. Claims 1-3, 4, 9, 13 are encompassed by claims 1-3, 9, 14 of U. S. Patent 6,721,325. It is well settled that elimination of elements and their function is considered to be obvious to one of ordinary skill in the art at. *In re Karlson*, 453 USPQ 184 (CCPA 1963).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shon (US 5,499,238) in view of Li et al. (US 5,757,771), herein after Li.

Regarding claims 1, 4, 9 and 13, Shon discloses an ATM multiplexing process device. The device consists of: a plurality of input buffers 1 for storing incoming cells; a cell identification device 2 (*scheduling means to determine sequence service times and to group sequence of similar service quality*) for classifying input cells data into a predetermined QOS class; a plurality of QOS buffers 3 for storing the incoming cells according to the class (*queuing means to place sequential items in per sequence queues*); and a scheduling part 4 for servicing the incoming cells with the highest priority (**see figs. 1-5B and col. 4 line 15 to co. 7 line 45**).

Shon fails to teach the device includes aging means to monitor sequence groups and to record aging components for each group, based on one or more age thresholds.

Li, on the other hand, teaches age and size thresholds may be assigned to each data sub-queue to better distribute available bandwidth among the sub-queues, and to ensure the cells are not excessively delayed (**see abstract, and col. 4 lines 38-44**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to includes the teaching of Li in the system taught by

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Shon for determining the ages of each packets or cells to ensure the cell are not excessively delayed.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shon-Li as applied to claim 1 above, and further in view of Drake, Jr. et al. (US 6,094,687).

Regarding claims 2-3, the combination of Shon-Li fail to teach the delay factor corresponds directly to Cell Delay Variation (CDV) and delay factor relates to maximum Cell Transfer Delay (maxCTD).

Drake, Jr. et al., on the other hand, teach the delay factor corresponds directly to Cell Delay Variation (CDV) and delay factor relates to maximum Cell Transfer Delay (maxCTD) and these parameters are defined in ATM (**see col. 4 lines 57-64**).

Therefore, it would have been obvious to one having ordinary skilled in the art at the time of invention was made to provide the teaching co Drake, Jr. et al., in the teaching or Shon-Li in order to comply with standard ATM network.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shon-Li as applied to claim 4 above, and further in view of Wallmeier (US 6,031,822).

Regarding claims 5-8, the combination of Shon-Li fail to teach the apparatus includes multiple shaping means or WFQ (weighted-fair-queuing) scheduler.

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Wallmeier, on the other, hand teach a statistical multiplex SMU in an ATM network consists of a plurality of WFQs SB0-SB27 and the SMU employ rate shaping method and the calendar mechanism (see figs. 2-4, and col. 3 line 17 to col. 5 line 18).

Therefore, it would have been obvious to one having ordinary skilled in the art at the time of invention was made to provide the plurality of WFQs and employ rate shaping method and the calendar mechanism as taught by Wallmeier and implement in the system taught by the combination of Shon-Li in order to implement the transmission of received cell streams according to their respective requirements.

Allowable Subject Matter

Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

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or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

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220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor **Kenneth Vanderpuye**, can be reach on **(571) 272-3078**. The fax phone number for this group is **(703) 872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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BOB PHUNKULH
PRIMARY EXAMINER

Bob A. Phunkulh

Bob A. Phunkulh

TC 2600
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April 23, 2004